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Joyce Cohen, Reg. No. 44,622

Patent Attorney's Docket No. <u>AMI-009-RC2</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

n re Patent Application of)
Γhomas E. JENKINS, et al.)
) Group Art Unit: 1627
Application No.: 10/075,017)
) Examiner: Unassigned
Filed: February 13, 2002)
)
For: NOVEL THERAPEUTIC AGENTS FOR)
MEMBRANE TRANSPORTERS)

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. Enclosed herewith is a modified form PTO-1449 listing documents for consideration by the Examiner.

Application No. <u>10/075,017</u> Attorney Docket No. <u>AMI-009-RC2</u> Page 1 of 4

Pursuant to § 1.98, those patents or publications which are marked with an asterisk (*) on the attached PTO-1449 form are not supplied because they were previously cited or submitted to the Office in prior application no. 09/499,176 filed February 7, 2000 and relied upon in this application for an earlier filing date under 35 U.S.C. § 120. The Examiner is requested to obtain copies of these documents from the parent application. If however, copies are not with the USPTO file, copies will be supplied upon the Examiner's request.

Additionally, the following documents were cited in the International Search Report for the corresponding PCT Application No. PCT/US99/12754. A copy of the International Search Report is enclosed for the convenience of the Examiner.

- 1. U.S. Patent No. 5,422,372, issued June 6, 1995, to Silverstein et al.
- 2. International Publication No. 92/05802, published April 16, 1992.
- 3. International Publication No. 94/04194, published March 3, 1994.
- 4. International Publication No. 97/35195, published September 25, 1997.
- 5. Cole et al., "Discovery of Chiral Catalysts through Ligand Diversity: Ti-Catalyzed Enantioselective Addition of TMSCN to *meso* Epoxides", *Angew. Chem. Int'l. Ed. Engl.* 35(15):1668-1671.
- 6. Gardiner, John M., "The Therapeutic Potential of Synthetic Multivalent Carbohydates," *Exp. Opin. Invest. Drugs.* 7(3):405-411 (1998).
- 7. Liang, et al. "Parallel Synthesis and Screening of a Solid Phase Carbohydrate Library", *Science*, 274:1520-1522 (1996).
- Menger et al., "Phosphatase Catalysis Developed via Combinatorial Organic Chemistry," J. Org. Chem. 60:6666-6667 (1995).
- 9. Shuker et al., "Discovering High Affinity Ligands for Proteins: SAR by NMR," *Science*, 274:1531-1534 (1996).

The following documents were cited in the Written Opinion for the corresponding PCT Application No. PCT/US99/12754.

Application No. 10/075,017
Attorney Docket No. AMI-009-RC2

- 10. U.S. Patent No. 5,463,564, issued October 3, 1995, to Agrafiotis et al.
- 11. U.S. patent No. 5,686,495, issued November 11, 1997, to Goldin et al.
- 12. Portoghese, P.S., "The Role of Concepts in Structure-Activity Relationship Studies of Opioid Ligands," *J. Med. Chem.* 35(11):1927-1937 (1992).
- Zeng et al., "Automated Analytical/Preparative High-performance Liquid Chromatography-Mass Spectrometry System for the Rapid Characterization and Purification of Compound Libraries," J. Chrom. A., 796:3-13 (1998).

The following documents were cited in the Search Report for the corresponding European Patent Application No. EP 99 92 8447. A copy of the European Search Report is enclosed for the convenience of the Examiner.

14. International Publication No. WO 97/09317, published March 13, 1997.

The following documents were cited in the Search Report for the corresponding Singapore Patent Application No. 9902725-2. A copy of the Search Report is enclosed for the convenience of the Examiner.

- 15. International Publication No. WO 96/11213, published April 18, 1996.
- 16. International Publication No. WO 98/03632, published January 29, 1998.
- 17. International Publication No. WO 98/11436, published March 19, 1998.
- 18. European Patent No. 0398367 A2, published November 22, 1990.

This IDS is being filed within three months of the application filing date and prior to a first Office Action on the merits, therefore no fee or certification is required under 37 C.F.R. § 1.97(b).

To assist the Examiner, the documents are listed on the attached form PTO-1449. Applicants respectfully request that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

THERAVANCE, INC.

(formerly ADVANCED MEDICINE, INC.)

Date: April 30, 2002

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Application No. 10/075,017 Attorney Docket No. AMI-009-RC2



include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

FORM PTO-1449 (REV. 12/96)

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

Attorney's Docket No. AMI-009-RC2 Serial No. 10/075,017

Applicant

Thomas E. JENKINS et al.

Filing Date

Group Art Unit (Use several sheets if necessary) February 13, 2002 Unknown U.S. PATENT DOCUMENTS Class Subclass Filing Date If Examiner Initial Ref. No. **Document Number** Date Name Appropriate Α1 *5,422,372 6/6/95 Silverstein et al. A2 10/3/95 Agrafiotis et al. *5,463,564 **A3** *5,686,495 11/17/97 Goldin et al. **A4** FOREIGN PATENT DOCUMENTS Examiner Initial Ref. No. Date Country Class Subclass Translation **Document** Number Yes No B1 *92/05802 4/16/92 **PCT** B2 *94/04194 3/3/94 **PCT** B3 4/18/96 **PCT** *96/11213 B4 *97/09317 3/13/97 PCT **B**5 9/25/97 **PCT** *97/35195 PCT B6 *98/03632 1/29/98 **B7** *98/11436 3/19/98 PCT **B8** *0398367 A2 11/22/90 Europe B9. OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) 'Ackerman, M.J. et al., "Ion Channels-Basic Science and Clinical Disease," *NEJM* 336:1575-1586 (1997). C1 C2 *Cole et al., "Discovery of Chiral Catalysts through Ligand Diversity: Ti-Catalyzed Enantioselective Addition of TMSCN to meso Epoxides", Angew. Chem. Int'l. Ed. Engl. 35(15):1668-1671. C3 'Gardiner, John M., "The Therapeutic Potential of Synthetic Multivalent Carbohydates," Exp. Opin. Invest. Drugs. 7(3):405-411 (1998). Gordon, E.M. et al., "Applications of Combinatorial Technologies to Drug Discovery. 2. Combinatorial C4 Organic Synthesis, Library Screening Strategies, and Future Directions," J. Med. Chem., 37(10):1385-1401 (1994). *Gottesman, M.M., et al., "Biochemistry of Multidrug Resistance Mediated by the Multidrug Transporter," C5 Annu. Rev. Biochem., 62:385-427 (1993). *Higgins, C.F., ABC TRansporters: from Microorganism to Man," Annu. Rev. Cell Biology, 8:67-113 C6 1992). EXAMINER DATE CONSIDERED EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered.

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FORM PTO-144 (REV. 12/96)		Ann	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office	Attorney's Docket No. AMI-009-RC2	Serial No. 10/075,017		
INFC	ORM	MATION DISCLOSURE CITATION	Applicant Thomas E. JENKINS et al.				
		Bas several sheets if r	necessary)	Filing Date February 13, 2002	Group Art Unit unknown		
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
C7		*Joslyn, A.F. et al., "Dimeric 1,4-Dihydropyridines as Calcium Channel Antagonists," <i>J. Med. Chem.</i> , 31:1489-1492 (1988).					
C8	3 *	*Kahrilas, P.J., "Gastroesophageal Relux Disease," J. Am. Med. Assoc., 276:983-988 (1996)					
C9	- 1	*Liang, et al. "Parallel Synthesis and Screening of a Solid Phase Carbohydrate Library", <i>Science</i> , 274:1520-1522 (1996).					
		*Menger et al., "Phosphatase Catalysis Developed via Combinatorial Organic Chemistry," <i>J. Org. Chem.</i> 60:6666-6667 (1995).					
C1	3	*Nakaido, H., "Prevention of Drug Access to Bacterial Targets: Permeability Barriers and Active Efflux," Science, 264:382-388 (1994).					
C1		*Portoghese, P.S., "The Role of Concepts in Structure-Activity Relationship Studies of Opioid Ligands," <i>J. Med. Chem.</i> , 35(11):1927-1937 (1992).					
C1		*Shuker et al., "Discovering High Affinity Ligands for Proteins: SAR by NMR," Science, 274:1531-1534 (1996).					
C1	4	*Task Force of the Working Group on Arrhythmias of the European Society of Cariology, "A New Approach to the Classification of Antiarrhythmic Drugs Based on Their Actions on Arrhythmogenic Mechanisms," Circulation, 84:1831-1851 (1991).					
C1	S	*Zeng et al., "Automated Analytical/Preparative High-performance Liquid Chromatography-Mass Spectrometry System for the Rapid Characterization and Purification of Compound Libraries," <i>J. Chrom. A.</i> , 796:3-13 (1998).					
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